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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,506	02/11/2004	Ned Baudat	27620/02	5266
7590 10/19/2005			EXAMINER	
GILBRETH & ASSOCIATES, P.C. P.O. BOX 2428 BELLAIRE, TX 77402-2428			LEUNG, RICHARD L.	
			ART UNIT	PAPER NUMBER
			3744	
DATE MAILED: 10/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/777,506

Applicant(s)

BAUDAT, NED

Examiner

Richard L. Leung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-11, 15 and 23 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 12, 14, 16 and 18 is/are rejected.
- 7) ☒ Claim(s) 2-4, 13, 17 and 19-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Claim Objections

2. Claim 13 is objected to under 37 CFR 1.75 as being a substantial duplicate of claim 9. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

Alternatively, claim 13 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 13 recites limitations that are identical to the limitations of claim 9 from which claim 13 depends and therefore fails to further limit claim 9.

3. Claims 16-22 are objected to because of the following minor informalities: the recitations of "inlet steam" on line 6 of claim 16, line 2 of claim 17, line 7 of claim 19, and

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line 2 of claim 20 are understood to be --inlet stream--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claim 12 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 12 requires the vaporizer to be mounted on the containment wall, but claim 9 from which claim 12 depends requires the vaporizer to be positioned in the containment area. These limitations are considered to be conflicting and do not appear to be supported by the written description. This rejection may be overcome by explicitly pointing out where in the specification proper support for claim 12 may be found.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 14 recites the limitation "wherein at least a portion but not all of the heat exchange medium inlet stream is routed through the foundation." There is insufficient antecedent basis for this limitation in the claim. Neither claim 14 nor the claims from which claim 14 depends previously recites a foundation.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 5, 16, 18 rejected under 35 U.S.C. 103(a) as being unpatentable over US 3225552 (Farkas) in view of US 2332227 (Jackson). Referring to Fig. 1, Farkas discloses an apparatus and method for vaporizing a cryogenic liquid such as liquefied natural gas, comprising a tank 10 containing the cryogenic liquid, a vaporizer 18 in liquid communication with the tank 10 to which the cryogenic liquid is passed, and further comprising a heat exchange medium inlet 34 and a heat exchange medium outlet 32 through which a heat exchange medium stream (water) is passed to gasify the cryogenic liquid and cool the heat exchange medium. Farkas fails to disclose that the tank is positioned on a foundation and fails to disclose routing the heat exchange medium outlet stream through the foundation. Jackson teaches a storage container for liquefied gases such as liquefied natural gas comprising a tank 11 that is positioned on a foundation through which a heat exchange medium such as water is passed via pipes 24. It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to have modified the tank disclosed by Farkas to be positioned on a foundation and to have passed the heat exchange medium through said foundation because Jackson explicitly teaches that such an arrangement would help equalize the temperature of the ground below and around the tank and help prevent heaving action caused by freezing. See particularly column 4, lines 12-40 of Jackson.

Allowable Subject Matter

10. Claim 2-4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claim 17 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and rewritten to overcome the minor informalities indicated above.

12. Claims 19-22 would be allowable if rewritten to overcome the minor informalities indicated above.

13. Claims 6-11, 15, and 23 are allowed.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 2964917 (Webster): discloses an apparatus for evaporating liquefied gases comprising a tank and vaporizer.

US 3047184 (van Bergen et al.): discloses a storage tank surrounded by a containment wall.

US 3076317 (La Fave): discloses a cryogenic storage tank with a heat exchange medium passage in the foundation.

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US 3274785 (Lange): discloses a cryogenic storage tank with means to heat the ground below the tank using gas.

US 3448886 (Todd et al.): discloses a storage tank on a foundation with a heat transfer passage located in the foundation.

US 3791164 (Laverman): discloses a cryogenic storage tank with a surrounding containment wall that is cooled.

US 3930590 (Ebbrell): discloses a storage tank for liquefied gas surrounded by a containment wall.

US 3986340 (Bivins, Jr.): discloses an apparatus comprising an LNG storage tank, vaporizer, and a heat exchange medium stream.

US 4209267 (Gnaedinger): discloses a storage system for LNG comprising a containment wall.

US 6199329 B1 (Witter): discloses a liquid storage system comprising a tank with surrounding dams.

JP 51-120422: discloses a method for preventing frost heaving around a storage tank using a heat exchange medium.

JP 53-132810: discloses the use of hot water to warm the ground surrounding a storage tank.

JP 09-177359: discloses a storage tank surrounded by a containment wall designed to direct wind into the space between the wall and the tank.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard L. Leung whose telephone number is 571-272-4811. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl J. Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Richard L. Leung
Examiner
Art Unit 3744

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MELBA N. BUMGARNER
PRIMARY EXAMINER